

ABSTRACT

A masking agent is applied as a patterned film 12 to a surface of piezoelectric material 11 to be processed, fluidized by contact with a solvent vapor V and dressed to a domed mask 14 by its surface tension. When the
5 piezoelectric material is dry etched together with the domed mask 14, its surface is processed to a convex profile corresponding to thickness distribution of the domed mask 14. Distribution and shape of the domed mask 14 is controlled by treating the piezoelectric material 11 with an oil repellant 13 so as to limit reflow of the masking agent to a specified region(s).
10 The processed piezoelectric material has a surface profile with a big mass at its center suitable for principal oscillation without spurious oscillation.